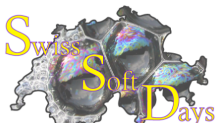


Nano 3D-Printing Device

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Introduction

Motivation and Introduction:

- Transition regime nanoparticles 1-1000 [nm]
- Scanning Tunnel Microscopy [STM]
- Light Amplification by stimulated emission of Radiation (LASER), a term coined by Albert Einstein
- Prediction of production efficiency increase with the increase of machines, in the angström, nano, and transition regime

Aim and goal:

- Particle Amplification by Stimulated Aerodynamic focusing Reinforcement (PASER)
- Nano 3D-Printing Device \Leftrightarrow PASER
- Light (Information) \Leftrightarrow Particles (Mass)

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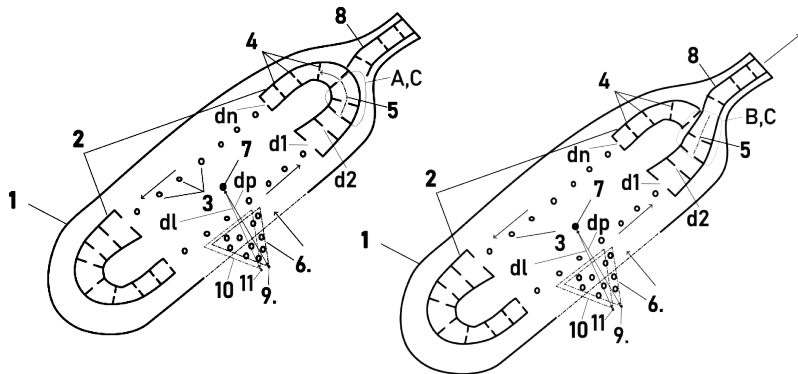


Figure 1: PRIO Patentapplication [HT23]

Research Program / Forschungsprogramm:

- Investigate new production method (first) 3D-Printing

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- Investigate other properties - cutting, reading, forming
- Investigate principle and practical production efficiency of new production method
 - experimental proof
 - quantification of hypothesis
 - new theoretical insights

Summary:

- PRIO application at Austrian patent office
- Working Principles disclosed
- Application of these leads to research program

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Conclusion:

- We can build a new device that exploits LASER principles
→ PASER
- The key feature is the focusing - here done by the aerodynamic focusing procedure

Outlook:

- Full Patent Application
- Build and test the prototype
- Investigate theoretical framework based on experimental and theoretical findings
- Discover possibly new predicted properties of the Nano 3D-Reading/Shaping/Printing/Cutting Device

Thank you cordially for your attention!



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PS.: The presentation can also be found at:

<http://www.dr-heiden.com/Vortraege.htm>



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